

CLAIMS:

1. Rotary-cutting disk (1) for a centrifuge, particularly for a separator, having
 - a) a disk-shaped base section (2) which is preferably adjoined by a tube-shaped section,
 - b) at least one draining duct (3) for a liquid phase being constructed in the base section (2), which draining duct (3) extends from the outer circumference of the base section at an acute angle to the flow direction starting in a curve toward the inside, which draining duct has an inlet (8) and an outlet (9),
characterized in that
 - c) at least one wall (4, 5) or the wall contour of the draining duct (3) is partially or in sections constructed in a wave shape.
2. Rotary-cutting disk according to Claim 1,
characterized in that the wave shape is formed by at least one wave contour (6a, 6b; 7a, 7b) which has at least one reversing point (W).
3. Rotary-cutting disk according to Claim 1 or 2,
characterized in that a function describing the contour of the wall(s) (4, 5) can be differentiated at each point with the exception of the inlet and the outlet (8, 9) from the draining duct and with the exception of the corner areas of an angular draining duct.
4. Rotary-cutting disk according to one of the preceding claims,
characterized in that at least one of the walls (4, 5) is provided at least in sections with one of the wave contours (7a).
5. Rotary-cutting disk according to one of the preceding claims,
characterized in that at least one wall is provided in sections with one of the wave contours (7a) at least over the first half of the path of the draining duct.
6. Rotary-cutting disk according to one of the preceding claims,
characterized in that the wave contours (6a, 6b; 7a, 7b) are constructed according to a trigonometric formula.

7. Rotary-cutting disk according to one of the preceding claims, characterized in that, with respect to their geometry, the wave contours (6a, 6b; 7a, 7b) are constructed according to a sinusoidal curve.

8. Rotary-cutting disk according to one of the preceding claims, characterized in that the wavelength $\lambda/2$ of the wave contours (6a, 6b; 7a, 7b) is greater, particularly at least two times greater, than their amplitude A.

9. Rotary-cutting disk according to one of the preceding claims, characterized in that equiphase wave contours (6a, 6b; 7a, 7b) are constructed in the wall in different areas of the wall(s) of the draining duct (3).

10. Rotary-cutting disk according to one of the preceding claims, characterized in that non-equiphase wave contours (6a, 6b; 7a, 7b) are constructed in the wall in various areas of the wall(s) of the draining duct (3).

11. Rotary-cutting disk according to one of the preceding claims, characterized in that the wavelength (P) of the wave contours (6a, 6b; 7a, 7b) changes from the inlet (10) to the outlet (11).

12. Rotary-cutting disk according to one of the preceding claims, characterized in that the wavelength (P) of the wave contours (6a, 6b; 7a, 7b) increases continuously from the inlet (10) to the outlet (11).

13. Rotary-cutting disk according to one of the preceding claims, characterized in that the wave contours are mutually phase-shifted at the different walls (4, 5).

14. Rotary-cutting disk according to one of the preceding claims, characterized in that the slope (α) of the wave contours (6a, 6b; 7a, 7b) is smaller than 20° relative to the normal curve line (K) in their reversing points.